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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,269	03/27/2001	Shaohua Yu	Q62636	7689
7590 06/10/2005			EXAMINER	
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC			WONG, BLANCHE	
2100 Pennsylvania Avenue, N.W.			ART UNIT	
Washington, DC 20037-3213			PAPER NUMBER	
			2667	

DATE MAILED: 06/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/817,269

Applicant(s)

YU, SHAOHUA

Examiner

Blanche Wong

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19, 21-41, 43-90 and 92-94 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 1-19, 21-41, 43-69, 71-90 and 92-94 is/are allowed.
6) ☒ Claim(s) 70 is/are rejected.
7) ☒ Claim(s) 7, 11, 32, 35 and 76 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 27 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 7, 32 and 76 are objected to because of the following informalities:
unclear. The variable x of the polynomial in cl. 7, ln. 3, cl. 32, ln. 3, and cl. 76, ln. 3, seems as though it is negative, i.e. "-x". Appropriate correction is required.
2. Claims 11 and 35 are objected to because of the following informalities:
limitation in parentheses. Examiner suggests removing the parentheses and replacing – (octet stuffing) – with "by octet stuffing" in cl. 11, ln. 2 and cl. 35, ln. 3. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. **Claim 70** is rejected under 35 U.S.C. 103(a) as being unpatentable over Kashio et al. (U.S. Pat No. 5,208,811) in view of Ishii et al. (U.S. Pat No. 5,323,392).

With regard to cl. 70, Kashio discloses a data transmission method (interconnection system and method for heterogeneous networks) from a lower layer side device (LAN Terminal) to an upper layer side device (ISDN Terminal, X.25 Terminal) comprising steps of:

receiving the data packets from said lower layer side device 200-j (LAN Terminals, col. 6, ln. 11; see also col. 7, ln. 50) ;

removing (MAC layer 202 processes the MAC header 50, col. 6, ln. 29) the overheads of said first type of frames (LAN frame);

extracting a SAPI field 52 (LLC header, col. 6, ln. 23)(LLC layer 204 processes the LLC header 52, col. 6, ln. 65-66) and the information 53 (information field, col. 6, ln. 24) from the payload portion of said first type of frames, to form 130 (LAN/ISDN Protocol Converter) a second type of frames (ISDN frame, specifically LAPD);

comparing (LLC 204 can be classified into an LLC-A and LLC-P, col. 7, ln. 1-3) the value of the SAPI field with a preset value, and determining (guaranteeing a frame transfer service, col. 6, ln. 63) to output the extracted data as it be if the value of the SAPI field data equals to said preset value;

and transmitting the extracted data packets to said upper layer side device 300-I (ISDN Terminals, col. 6, ln. 13; see also col. 7, ln. 51).

However, Kashio fails to explicitly show converting said second type of frames (ISDN frame, specifically LAPD) to a third type of frames corresponding to in said data packets.

In an analogous art, Ishii discloses an adaptation device between LAPD and LAPB (a third type of frames).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include a conversion between LAPD and LAPB before transmission to an upper layer side device (such as X.25 Terminal). The suggestion/motivation for

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doing so would have been to increase internetworking. Ishii, col. 2, ln. 27. (LAPD (specific to ISDN) and LAPB (specific to X.25), col. 2, ln. 54-56). Therefore, it would have been obvious to combine Ishii with Kashio for the benefit of numerous types of networks (heterogeneous networks of Kashio, internetworking of Ishii) to obtain the invention as specified in cl. 70.

Allowable Subject Matter

5. Claims 1-19,21-41,43-69,90,92-94 are allowed.
6. Claims 71-89 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is 571-272-3177. The examiner can normally be reached on Monday through Friday, 830am to 530pm.
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BW

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June 1, 2005

Chau T. Nguyen

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